Two days to mark on your calendar:

July 31 and August 1, 2004, Savannah, Georgia

Pre-Meeting Congress

Organizers:
Christian Kisielowski, Lawrence Berkeley National Laboratory
Bernd Kabius, Argonne National Laboratory
Frances Ross, IBM T. J. Watson Research Center
Ray Phaneuf, University of Maryland

Featured Invited Speakers:
J.C.H. Spence
D. Van Dyck

Recent progress with the correction of lens aberrations is already beginning to revolutionize electron microscopy. Projections indicate that this technological development will impact the majority of electron optical instrumentation: TEM, STEM, SEM, electron beam lithography, as well as LEEM, PEEM and even focused ion beams. For example, in situ transmission electron microscopes with suitably large pole gaps and a resolution approaching one Angstrom or instruments operating between 100 - 200 kV with deep sub-Angstrom resolution will emerge in the foreseeable future and they will be of benefit to biological, chemical, and materials sciences. This session welcomes technological and numerical contributions towards the correction of aberrations in charged particle optics. Equally important are scientific contributions that discuss the current experimental or theoretical limitations imposed by lens aberrations and future goals that will be achievable by aberration correction. We expect that the 2004 pre M&M meeting of the Focused Interest Group will cover a broad range of future oriented technological and scientific advances, including in-situ experimentation in different types of electron microscopes, electron tomography, the development of diffraction techniques, and the investigation of amorphous materials.